

Experimental Gridded MOS (GMOS) Products & ftp File Server Structure

These products will have headers on them when they are sent out to the SBN through the TOC/Gateway, but there are no WMO headers in the files on the tgftp server.

This guidance is based on GFS model output, and is broken up into two directory structures for short-range guidance (day 1 through day 3), and for extended-range guidance (day 4 through day 7). It is running in parallel production on NCEP's Central Computing System every day, twice a day from 0000 and 1200 UTC model runs.

Guidance products are aggregated for the same weather element and geographical area. The aggregation is stored in individual files on the ftp server where a single file contains individual products for groupings of forecast periods. Groupings of forecast periods are designated as days 1 – 3 and days 4 – 7. For user convenience and for eventual consistency with NDFD, the products for Day 4, hour 00, are included in the days 1 – 3 file. The remainder of the MOS guidance beyond Day 4, hour 00 is included in the days 4 – 7 file.

NOTE₁: All products are in grib2 format and cover the CONUS on the NDFD grid. At this time, this guidance is considered an experimental prototype; only the western third of the grid is populated with guidance; the remainder of the grid contains missing values. We are currently guiding this through the Operations and Service Improvement Plan (OSIP) process for careful review and coordination with other NWS offices.

More documentation is available at <http://weather.gov/mdl/synop/gmos.html>

NDGD tgftp file structure

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndgd/GT.mosgfs/AR.conus/>

status of data (experimental): ST.expr/
data format (grib2): DF.gr2/
data category (ndgd): DC.ndgd/
guidance type (gfs-based MOS): GT.mosgfs/
area of data (CONUS): AR.conus/
valid period VP.001-003/ – for days 1 to 3
VP.004-007/ – for days 4 to 7

ds.sssss (file name or data subcategory): ds.maxt.bin – max temperature
ds.mint.bin – min temperature

ds.temp.bin – 2-m temperature
ds.td.bin – 2-m dewpoint

(snow, probability of thunderstorms, probability of precipitation, and others will be added soon)

Thus, as an example, the complete file name containing the gridded MOS max temperatures for days 4 through 7 looks like:

<ftp://tgftp.nws.noaa.gov/SL.us008001/ST.expr/DF.gr2/DC.ndgd/GT.mosgfs/AR.conus/VP.004-007/ds.maxt.bin>

Table 1. Groupings for gridded MOS (GMOS) products.

Gridded MOS Element	Valid Period (VP)	No. of grids per file(00/12Z)	Time increment/final projection	Size per grid
Temperature	001-003	23 – 27	3/84	250K
	004-007	36 – 40	3/192	
Dew Point	001-003	23 – 27	3/84	250K
	004-007	36 – 40	3/192	
Daytime Max	001-003	3	24/84	250K
	004-007	4 – 5	24/192	
Nighttime Min	001-003	3	24/84	250K
	004-007	4 – 5	24/192	